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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,042	09/07/2000	Weifang Luo	08935-220001 / M-4931	2542 <i>23</i>
26161	7590	10/02/2003	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			KALAFUT, STEPHEN J	
			ART UNIT	PAPER NUMBER
			1745	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/658,042

Applicant(s)

LUO ET AL.

Examiner

Stephen J. Kalafut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-15 and 19-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23, 25, 26 is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 10-15, 19-22, 24, 27-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 44 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification and originally filed claims are all directed to cathodes including carbon fibers, while this claim encompasses carbon in any form, and would thus contain new matter.

Claims 1, 3-8, 10-12, 19-22, 35-40 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomantschger *et al.* (US 5300371), for reasons of record as applied in the last office action (paper no. 20), to claims 3-7, 9-12, 35, 36 and 38.

New claim 44 differs from claims 3-7, 9-12, 35, 36 and 38 as previously presented in that it does not require the carbon to be in the form of fibers, and is thus broader. Since claim 44 encompasses the subject matter of these other claims, it is subject to the same rejection.

Claims 13-15, 24, 27 and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomantschger *et al.* (US 5,300,371) in view of Friend *et al.* (US 5,110,693), for reasons of record.

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Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over T Tomantschger *et al.* (US 5,300,371) in view of Di Franco (US 5,041,199), for reasons of record.

Claims 41 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Friend *et al.* (US 6,248,478).

These claims have been amended to recite MnO<sub>2</sub> as the cathode active material. Friend *et al.* disclose a cell with a cathode of MnO<sub>2</sub> and carbon fibrils (column 4, lines 4-7). Thus, a cathode comprising MnO<sub>2</sub> and carbon, the carbon consisting of fibers, is disclosed. While a Leclanche is exemplified, a primary alkaline cell is also disclosed (Table 1). The cell also includes an anode (12) and a separator (16). Comparing the amounts of carbon fibrils and total cathode weight (Table 2), the amount of carbon fiber is less than 5 weight percent.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friend *et al.* (US 6,248,478) in view of Tomantschger *et al.* (US 5,300,371).

This claim differs from Friend *et al.* by reciting a binder within the cathode. Tomantschger *et al.* teach the use of small amounts of binder, to provide hydrogen permeability or lubrication as the cathode is inserted into the cell container (column 15, lines 45-55). For these reasons, it would be obvious to add a small amount of binder, as taught by Tomantschger *et al.* to the cathode mix of Friend *et al.*

Claims 23, 25 and 26, for reasons of record, are allowed.

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Applicant's arguments filed 7/11/03 have been fully considered but they are not persuasive.

Applicant argues that Tomantschger *et al.* does not disclose or give motivation to make a cathode with carbon fibers and an active material which constitutes at least 86 percent of its weight, citing examples containing 79.01, 83.03 and 84.11 weight percent active material. This is not persuasive because a disclosure cannot be limited to only its most specific examples. Furthermore, Tomantschger *et al.* teach the purpose of their invention, to maintain mechanical integrity without physically confining their cathode, or using large amounts of binders (column 10, lines 58-63). This avoidance of large amounts of binders would mean that the amounts of the other components, including that of the active material, would be increased. While motivation in an obvious rejection must be found in the prior art, the prior art motivation does not have to be the same as the reason discovered by applicants.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 703-308-0433. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 703-308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

sjk

  
STEPHEN KALAFUT  
PRIMARY EXAMINER  
GROUP 1700